PCN52

TREATMENT PATTERNS AND ASSOCIATED COSTS OF THE METASTATIC PROSTATE CANCER, RETROSPECTIVE DATA BASE ANALYSIS OF THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM

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OBJECTIVES: Define the treatment patterns and associated costs to treat metastatic prostate cancer in Brazilian private health care system. **METHODS:** In a nationwide oncology claims database of 3.5 million lives, from August 2010 to July 2011, 67 patients were identified with metastatic prostate cancer using chemotherapy. Patients using hormone therapy were excluded. The database gathered information regarding the treatment patients were submitted, to average duration and medication dosage. **RESULTS:** Patients were on average 71 years old, weighted 78 kilograms and measured 1.70 meters. Among the 67 patients, only 5 (7%) were submitted to first line treatment with mitoxantrone and 62 (93%) with docetaxel; 58% of all patients took a second line treatment. From the 62 patients that started with docetaxel (121.5 mg average dose for each of the 6.5 cycles (21days)), 28 had a second line treatment with mitoxantrone (20mg average dose for each of the 3.9 cycles (21days)) with total average cost/patient of R$ 39,698 (USD 22,056); 7 were retreated with docetaxel (60mg average dose for each of the 6 cycles (7days)). From the 5 patients that started with mitoxantrone (20.6mg average dose for each of the 3.2 cycles (21 days)), 4 continued the treatment with docetaxel (60mg average dose for each of the 3 applications (21 days)) with a total average cost/patient of R$ 12,795 (USD 7,107). **CONCLUSIONS:** The database suggests that docetaxel is the most commonly used first line treatment to metastatic prostate cancer in the Brazilian private health care system. Forty-two percent of the patients were not submitted to a second pattern in the period studied, being that 18% of the ones that had a second line treatment were retreated with the same medication (docetaxel).

PCN53

PATTERNS OF CARE AND COSTS ASSOCIATED WITH TREATMENT OF PATIENTS WITH BONE METASTASES SECONDARY TO PROSTATE CANCER

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OBJECTIVES: Treatment of bone metastases secondary to prostate cancer typically involves different provider types and a combination of surgery, radiation, and pharmaceutical treatment. This study evaluated treatment patterns and costs for patients with bone metastases secondary to prostate cancer. Which providers had patients with bone metts that increased costs in surgery, radiation and chemotherapy compared to no bone metts? **METHODS:** Continuously enrolled patients in the MarketScan database between January 2004 and December 2010 with evidence of bone metastases (ICD9 code 198.5 or treatment with one of the following medications: zolderonic acid, pamidronate, or demosumab) were included. The relationship between patterns of care regarding physician specialty, type of therapy and cost of treatment were assessed. **RESULTS:** Total of 4493 patients had evidence of bone metastases. Most patients (n=2633, 59%) had both an urologist and a radiologist involved in their care. Common combinations of providers were urologist and radiologist (U&R, 22%); urologist, radiologist, and surgeon (U, R&S, 21%), and urologist, radiologist, and oncologist (U, R&O, 17%). A majority of patient were prescribed hormone therapy (89%) and 76% were prescribed steroid agents (mostly glucocorticoids). Half of the population received radiation therapy (n=2274, 51%) and 1,838 (41%) received surgery related to their prostate cancer. Significant differences in total cost, depending on the mix of specialists involved in care: U&R: $22,133; U, R&S: $28,305; and U, R&O: $34,366 ($p<0.001$ for all pairwise comparisons). Common treatment combinations were also associated with significantly different total costs: patients receiving steroids, radiation, chemotherapy, and hormone treatment cost the most (mean: $47,914) while patients steroids, surgery, chemotherapy, and hormone therapy cost the least (mean: $31,612). **CONCLUSIONS:** Significant variation in patterns of care and total costs for patients who have bone metastases secondary to prostate cancer. Additional studies should examine the potential drivers of this variation and strategies to maximize cost-effectiveness.

PCN54

EVALUATING THE INPATIENT HOSPITALIZATION COSTS OF TREATING PROSTATE CANCER PATIENTS

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OBJECTIVES: Previous studies documenting the clinical and economic burden of prostate cancer (PCa) have highlighted that a substantial proportion of PCa care is completed in the inpatient hospital setting. No studies to date, however, have documented specific patterns of care within the inpatient setting. This study evaluated treatments and the associated cost of care for PCa patients treated in an inpatient setting. **METHODS:** Patients in the Premier Hospital Database between January 2006 and December 2010 treated in an inpatient setting for PCa (ICD9 Codes 185 and 233.4) were included. Patients were required to be ≥40 years of age with no additional cancers. Utilization of PCa-specific treatments and costs across relevant inpatient cost centers were assessed and described. **RESULTS:** There were 88,151 hospitalizations of men treated for PCa in an inpatient setting. The mean age of the sample was 69 years, with 68% being Caucasian. The average hospitalization cost was $12,286 for 4 days of stay. The most common treatments provided were surgery (57%), miscellaneous drug therapy (39%), hormone therapy (30%), and radiation treatment (4%). Accordingly, approximately 26% of costs were associated with surgery, and 31% were associated with room and board; pharmaceuticals accounted for 8% of costs. **CONCLUSIONS:** Men treated for PCa in an inpatient setting averaged $4516 per day for approximately 4 days, with surgery and miscellaneous drug therapy being the most frequently used inpatient treatments.

PCN55

TOTAL HEALTH CARE EXPENDITURES IN NEWLY DIAGNOSED COLORECTAL CANCER ADULTS WITH PRIVATE INSURANCE IN A CLAIMS DATABASE IN THE UNITED STATES

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OBJECTIVES: This study examined total health care expenditures in newly diagnosed subjects with colorectal cancer (CRC) over time and by lines of therapy received. **METHODS:** Patients aged 18-years and older when newly diagnosed with CRC between January 1, 2005 and June 31, 2009 were identified using a large, US-based administrative medical claims (MarketScan) database. Patients were identified with CRC if they had an ICD-9-CM claim for a primary diagnosis of colon or rectal cancer on 2 different days but within 180 days of each other. At least 6 months of patient history prior to CRC diagnosis and at least 1-year post-index continuous enrollment was required. Patients were followed from initial CRC diagnosis (index date) to disenrollment or June 31, 2010. Chemotherapy and biologic treatments over time were analyzed to identify lines of therapy. Total health care costs included costs associated with CRC and other comorbidities. Univariate analyses were performed to examine changes in costs over time and with increasing lines of therapy. **RESULTS:** A total of 23,547 subjects were included with a mean age of 65.3 years, 49% were over 65 years, and 52% were males. They were predominately from the South (40%) and the Midwest region (36%) and majority (54%) were enrolled in a preferred provider organization plan. 63% of the subjects received no systemic treatment for CRC and 17%, 13%, and 7% received 1st line only, 2nd line only and 3rd + lines of treatment for CRC, respectively. The mean annualized costs increased from $20,785 to $50,255 for those diagnosed in 2005 to 2009 (p-value < 0.001). The mean annualized costs for those receiving 1st line only, 2nd line only and 3rd + lines of treatment were $46,277, $69,244, and $108,819, respectively. **CONCLUSIONS:** Annualized total health care costs in newly diagnosed CRC subjects more than doubled from 2005 to 2009 growing faster than medical inflation.

PCN56

BENCHMARKING USE IN ECONOMIC VALUE ASSESSMENT OF ONCOLOGIC DRUGS-EXAMPLE OF CABACITAXEL

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OBJECTIVES: Prostate cancer is the most frequent non skin cancer in men in west European countries. The first line treatment in metastatic prostate cancer is hormonal therapy, however in 18-24 months it slowly turns over into metastatic hormone resistant prostate cancer (mHRPC). The aim of this analysis was to characterize the economic value of cabazitaxel in second line treatment of mHRPC. **METHODS:** A benchmarking analysis was performed, comparing cabazitaxel with other chemotherapeutic regimes used in second line treatment in Europe. As comparators we used drugs registered between 1.1.2004–18.1.2011 by EMA (according European public assessment report EPAR) for second line treatment of oncologic diseases. Generic products (as for example docetaxel, topotekan, talidomid, temezolomid) were not taken into account. As outcome data we used the information about overall survival from the last analysis, if it was possible intention to treat was used. These data was gathered from EPAR and Summary product characteristic and given into context with market prices, what allowed direct analysis of costs and outcomes. The total costs for therapy were counted according the median of therapy duration, dosing and price per milligram. As example we used prices in Spain. **RESULTS:** Together 25 substances were detected, in between them orphan medical products as well. Cabazitaxel demonstrated the second best benefit in overall survival (cetuximab over the best supportive care HR=0.51 [0.41- 0.75, $p<0.0001$, cabazitaxel over mitoxantrone HR= 0.7 [0.59-0.83] $p<0.0001$). According the price cabazitaxel reached the sixth rank. The price for one vial was 3833 euro and the price for one patient was 22 998 euro. **CONCLUSIONS:** The price versus overall survival hazard ratio comparison detected cabazitaxel as the second substance, mostly reducing risk of death and thus with costs which are comparable with other second line treatments in oncology.

PCN57

COST EFFECTIVENESS OF NILOTINIB VERSUS IMATINIB AS FIRST LINE TREATMENT FOR NEWLY DIAGNOSED HONG KONG (HK) PATIENTS WITH CHRONIC PHASE, PHILADELPHIA CHROMOSOME-POSITIVE (PH+) CHRONIC MYELOID LEUKEMIA IN THE CHRONIC PHASE (CML-CP) IN HONG KONG

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OBJECTIVES: The ENESTnd study showed that in newly-diagnosed patients with Ph+ CML-CP nilotinib (300mg BID) had greater efficacy than imatinib (400mg QD) in